

Building Boat Ramps

A Field Season of Covering the Extremes

By Craig Bihrlé

In his first year as fisheries development project manager, Bill Haase has dealt with just about every boat ramp challenge imaginable. "You plan on things not going as well as you hoped," Haase admits, but so far this year the Game and Fish Department has been involved in more major projects than in any typical two-year period.

A good example is the ramp behind Haase, scraped out of the shoreline south of Minnewakon on the west end of Devils Lake. Accompanying photos show work in progress. Building a boat ramp is not just digging out a slanted entrance into the water. Creating fairly level parking and turn-around space, as well as an adequate access road, to accommodate heavy use by boaters is just as important as the ramp itself.

Water levels on North Dakota's two largest water bodies are headed in opposite directions, and right in the middle is Bill Haase, Game and Fish Department fisheries development project manager, whose job it is to make sure anglers and recreational boaters can still get their crafts in the water. After a hectic spring and early summer, Haase's mission was mostly accomplished, despite an array of challenging circumstances.

At Lake Sakakawea, a reservoir on the Missouri River System that stretches west from central North Dakota nearly into Montana, the water level has been gradually receding for several years. In May 2004, Sakakawea's surface reached its lowest level since the reservoir first filled in the early 1960s. A decline of several feet over the winter left nearly every ramp on the lake unusable when the ice went out in mid-April.

At Devils Lake, the state's second largest body of water and the second most visited fishery, the water has been going up for the



Craig Bihrlé

last decade. Heavy rains this spring added more water to Devils Lake, which threatened some ramps that were already extended upward or moved altogether within the past several years.

"The priority so far has been just getting boat ramps useable," Haase said in mid-June as he assessed the work completed in two months following ice-out.

The 300 or so other lakes in the state, that "all have little things that need to be done," Haase said, were sort of on stand-by. After most major work on the big lakes was completed in June, Haase and his crew could start on the list of necessary, though less urgent tasks, such as sign replacement and maintenance, that will take them thousands of road miles

and to all corners of the state before weather shuts down the field work season.

Maintaining access to North Dakota fishing waters is not always so challenging, but in the last decade a variety of factors have made it an urgent topic of interest among the state's 50,000-plus boat owners.



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Starting from scratch, the fisheries development crew and private contractors gradually created a new boat ramp on the west end of Devils Lake this spring. The end result, pictured on page 14, took several weeks to accomplish.



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Work at the Big Lakes

As a reservoir, with water coming in primarily from the Missouri River on the western end and going out Garrison Dam on the eastern end, Sakakawea's water level typically fluctuates several feet during a year. Most boat ramps around the lake were built to handle that fluctuation, assuming the lake level is in the normal operating range. But all ramps have a top and a bottom and when the water drops below a certain point the ramp end is exposed.

In the late 1980s and early 1990s that happened for the first time. In the following years the water went up some 30 feet, covering all the temporary ramps carved out to get boaters on the water. Then the water started going down again.

Water surface level is measured in feet above mean sea level. As recent as 1998, Sakakawea measured more than 1,840 feet msl. This spring the level dropped below 1,815 feet msl.

At Sakakawea, many ramps were built in bays to provide some wind protection, with the ramp bottom and bay bottom at similar elevation. Many bays are now dry, leaving behind ramps that were extended at each site to the lowest elevation possible. In these situations, when water recedes below the ramp, it is not always possible to just extend the existing ramp if the adequate slope does not exist. Maintaining access in many areas requires complete relocation of the ramp area, sometimes hundreds of yards away from niceties associated with permanent ramps like paved or leveled parking lots, restrooms, fish cleaning stations and nearby campgrounds.

However, when the choice is not getting on the water at all, or tolerating a little inconvenience, most anglers will take the inconvenience.

At ice-out this spring, Sakakawea had only four usable ramps. As of mid-July that number was up to 21, and many of those 17 additional ramps were relocations of last year's low-water ramps.

At Devils Lake, the state's second largest lake, the situation is much different. In the early 1990s Devils lake stood at around 1,420 msl. There was concern about a widespread winter fish kill and talk of a channel to bring Missouri River water into Devils Lake to protect the fishery.

Since then, the same wet years that added

water to Sakakawea brought Devils Lake's level up above 1,449. As the water went up, boat ramps were extended upward. A few were covered by water with no options for extension. In their place new ramp sites were located. As a natural lake surrounded by mostly private land, locating new ramp sites at Devils lake involves securing new easements or ownership, which can make the process much more drawn out than at Sakakawea, where the shoreline is all publicly owned by the U.S. Army Corps of Engineers. Nevertheless, Devils Lake currently has about the same number of boat ramps it did in the early 1990s.

In 2004, winter ice damaged several ramps at Devils Lake that eventually required repair, and an early spring rain deluge started an unexpected water level rise that threatened to flood other ramps unless work was done to relocate the ramp site or build up the area. "A lot of my work there is maintenance," Haase said. "We had boat ramps there. We were just repairing them to get them to a useable state."

All the extra work on the state's two largest lakes is a pinch on the Game and Fish budget. The Department had a \$600,000 budget for statewide ramp development and improvements for the 2003-05 biennium, according to Terry Steinwand, fisheries division chief. This year on Lake Sakakawea alone, Steinwand said Game and Fish will spend approximately \$500,000 to \$600,000. To help cover additional expenses, the Department received approval for another \$500,000 through the State Emergency Commission.

Many Project Partners

While the Game and Fish Department has invested nearly \$600,000 into just Lake Sakakawea this year, it is only part of a far-reaching cooperative effort between agencies, organizations and individuals to keep boats on the water. The Corps of Engineers, State Parks and Recreation Department, and numerous local government entities and sporting groups have also contributed \$600,000 to \$700,000 for boating access on Sakakawea.

While much boating access work this year has been concentrated on Lake Sakakawea and Devils Lake, the rest of the state is not being overlooked, Steinwand said. "More than \$350,000 is being spent this year on



Game and Fish often hires local contractors to help with boat ramp projects, as is the case with this Bobcat owner working on a ramp extension at Black Tiger Bay on the eastern end of Devils Lake.

Below: Access road leading out to temporary ramp at Parshall Bay on the north side of Lake Sakakawea. Parked rigs indicate anglers are eager to get on the lake despite inconveniences posed by low water.





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Nate Wiese and Wesley Erdle, summer workers on the fisheries development crew, pound in a post needed for a handicap parking area sign. Signs are necessary to keep order, direct movement and provide regulations at access sites, and the development crew is responsible for perhaps thousands of signs on the 300-plus lakes Game and Fish manages.

access on statewide lakes other than Lake Sakakawea and Devils Lake," he added. "The extreme circumstances means the challenge is high, not only for Game and Fish but also for the people using those facilities, so we ask boaters to please be patient and courteous while waiting for others to load and unload their watercrafts."

Devils Lake and other statewide access sites also involve important partnerships to initiate, construct and maintain ramps. "Rarely, if ever, is it just myself and my crew doing all the work," Haase said. "We definitely do get a lot of help."

Every Game and Fish boat ramp project involves at least some financial partnership. Game and Fish typically funds 75 percent of each effort, with another government agency



or private organization contributing the other 25 percent in (non-federal) cash or in-kind services. A local group usually also commits to maintaining the ramp site – things like trash removal, and putting docks in and taking them out – while Haase gets a call if serious problems develop.

The Missouri River System alone has 54 access sites and more than 90 ramps when all are operational. More than 20 other agencies or organizations are involved in day-to-day management of these sites. Spread that out to around 300 managed lakes and Game and Fish has partners in every county and many small towns across the state, and it's not just financial help.

For many projects, local volunteers assume major responsibility. At Devils Lake specifically, Haase said, local anglers helped find potential sites for new ramps, and worked with lakeside landowners on arranging easements. "That way we can get to more sites, if

we get help from local clubs," Haase emphasized. "Without them, it would be a lot more work trying to line everything up."

The unfortunate aspect of unpredictable lake levels at the state's most popular fishing waters is that, depending on weather and other factors, much of the work done this spring and summer might need repeating in 2005. While the water level at Lake Sakakawea went up 20 feet in 1993-94, no one is counting on that kind of influx to help reduce the boat ramp upkeep load.

"We are closely monitoring water level projections for Lake Sakakawea, and are in the process of formulating a plan to provide adequate access as conditions dictate," Steinwand said. "We could be going through the same process next year."

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The old ramp on Devils Lake near Minnewaukon was still usable in mid-June, but with predictions for the water level to increase, it's evident that just a few more inches would put this parking lot under water. The new ramp on page 14 was built to accommodate boaters if this one becomes no longer usable.



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